

**WPI**

TI - Ferroelectric film deposition method for ferroelectric capacitor element  
 - has Pt layer and SBTN type oxide layer whose lattice parameters with support to that of substrate, lies within predetermined value to restrict mismatching condition

AB - JP11017126 NOVELTY - A Pt layer and a SBTN structural oxide layer are deposited on a MgO coated silicon substrate. The lattice parameters of the substrate-Pt layer and Pt layer-SBTN type oxide layer lies within predetermined value to restrict the mismatching condition.  
 - USE - For ferroelectric capacitor element, non-volatile memory, Pyroelectric property IR sensor, optical display, optical switch, piezoelectric transducer and SAW device.  
 - ADVANTAGE - Offers different resistance factor and coercive value.  
 DESCRIPTION OF DRAWING(S) - The figure shows structure of ferroelectric capacitor.  
 - (Dwg.2/13)

PN - KR99006318 A 19990125 DW200014 H01L21/205 000pp  
 - JP11017126 A 19990122 DW199914 H01L27/10 012pp

PR - US19970881418 19970624

PA - (SHAF ) SHARP KK

MC - L03-B03 L03-C04 L03-D04D L03-G04A L04-E05C L04-E08  
 - U12-C02F U12-Q U13-C04B1A U14-A03F U14-G V06-K05 V06-L02 V07-K01A

DC - L03 P81 U12 U13 U14 V06 V07

IC - G02F1/05 ;H01J9/20 ;H01L21/205 ;H01L21/822 ;H01L21/8242 ;H01L21/8247 ;H01L27/04 ;H01L27/10 ;H01L27/108 ;H01L29/788 ;H01L29/792 ;H01L37/02 ;H01L41/09 ;H01L41/24

AN - 1999-159638 [14]

**PAJ**

TI - DEPOSITION OF FERROELECTRIC FILM AND FERROELECTRIC CAPACITOR ELEMENT

AB - PROBLEM TO BE SOLVED: To deposit an orientation-grown or epitaxially grown multilayered thin film of ferroelectric oxide with a high reliability by a method wherein a multilayered oxide film has a lattice parameter in the prescribed extent of a metallized layer.  
 - SOLUTION: A thin bottom electrode 12 is deposited on a substrate 10 using either of a standard PVD process and a chemical process for thin film deposition and, if necessary, an intermediate template layer 11 is provided between the substrate 10 and the electrode 12, whereby the electrode 12 may be grown along a specified orientation. After that, 8 ferroelectric layer 13, which is a multilayered oxide layer, is deposited on the electrode 12 and a top electrode 14 is deposited on the layer 13 via a shadow mask, whereby some capacitors are formed on the wafer. In case of need, buffer layers 15 and 16 are respectively laminated additionally between the layer 13 and the electrode 12 and between the layer 13 and the top electrode 14. As a result, a high-quality multilayered thin film of ferroelectric oxide suitable to apply to a nonvolatile random access memory is obtained.

PN - JP11017126 A 19990122

PD - 1999-01-22

ABD - 19990430

ABV - 199904

AP - JP19970350891 19971219

PA - SHARP CORP

IN - SESHU DESU;DILIPP BIJEI

I - H01L27/10 ;G02F1/05 ;H01J9/20 ;H01L27/04 ;H01L21/822 ;H01L27/108 ;H01L21/8242 ;H01L21/8247 ;H01L29/788 ;H01L29/792 ;H01L37/02 ;H01L41/09 ;H01L41/24

Substrate for non-volatile RAM.

